

S.N. 10/002,589
Stephen C. Heinrichs

10. A multi-purpose strap according to claim 1 wherein said strap comprises a single length of flat belting which has been folded over at a midway point onto itself into two equal half-length sections, wherein both of said sections have been tucked inwardly and directed in equal amounts toward but not reaching said folded-over midway point, and wherein the inwardly tucked ends and adjacent portions of said belting have been stitched together to form said central area, said at least one second loop comprising a single loop extending between the central stitched area and said folded-over midway point.
16. A multi-purpose strap according to claim 1 wherein the total extended length of said unitary strap between its ends is between twenty and thirty-six inches when said multi-purpose strap is extended in elongated form.

Cancel claims 3, 5, 6, 13-15, 17, 19 and 20.

REMARKS

Claims 1-20 have been rejected. Claims 1, 7, 10 and 16 have been amended to better define the invention over the cited art, and claims 3, 5, 6, 13-15, 17, 19 and 20 have been canceled. Claims 1, 2, 4, 7-12, 16 and 18 remain for consideration.

A sheet of the drawings has been attached at the end as EXHIBIT A to illustrate how the drawings would be modified in order to meet the objection raised by the Examiner. Corrections will be made upon allowance.

The Examiner is invited to visit applicant's website at massstrap.com to view several of the multiple uses of the subject of the application. The new design of this application can, in fact, also be used to perform certain of the functions performed by applicant's earlier designs illustrated in his two patents mentioned in the specification and

S.N. 10/002,589
Stephen C. Heinrichs

cited by the Examiner. The website shows those newly claimed uses of the strap where the "pair of first body-securing loops" of the claims may be secured about a pair of an individual's wrists and a person is suspended or dragged by said "at least one second supporting loop". Applicant advises that an experimental one of the new straps was in use at the New York World Trade Center during the destruction of those buildings by terrorists on 9/11/01. However, the fireman reported that things happened so quickly that he never had an opportunity to use it as intended, before he had to evacuate. Since that time, numerous fire fighting units have purchased and are regularly using the straps as part of their standard operating equipment carried into burning buildings.

The amendments to the claims are intended to show how discrete bodies can be secured with the strap and those bodies then be suspended, towed, dragged, etc. from one location or position to another. The "bodies" referred to may be a person's two wrists, a pair of deer's antlers, a bow and supply bag of a hunter for lifting multiple objects into a tree hunting stand, or any of the several other uses depicted in the applicant's website, and more as yet undiscovered. Applicant's simple and compact (when folded) strap design is superior and believed patentable over his prior designs and the cited references. The limitations added to the claim preamble "breathe life and meaning into the claim". (MPEP 2111.02).

It is believed that a unitary strap comprising a pair of body-securing loops interconnected and secured at a central area to at least one supporting loop, each of which body-securing loops of the pair is individually secured to an animate or inanimate body or object, is totally lacking in any of the cited art. Applicant was intrigued with Crouch 6,447,037. He was unfamiliar with Crouch until receiving the rejection. Crouch does

S.N. 10/002,589
Stephen C. Heinrichs

not consider use of his single strap for anything other than threading through a number of bag handles where multiple bags are intended to be carried by the same strap loop. The direction arrows of Figs. 2 and 3 of Crouch show the threading of his strap through a plurality of bag handles and coming back on itself to pass the single loop at one end through the single loop of the other strap end.

It is believed that the proposed numeral changes to the drawings will make them conform to the specification, as noted in Section 2 of Paper 2. If not, the Examiner's suggestions would be welcomed. (Incidentally, although the undersigned will be able to communicate periodically with his answering machine, he will be away from his office from Jan. 27 through about March 5.) Any contact from the Examiner would be appreciated before or after that period if made by phone or fax.

Also regarding the drawings and the objection specified in Section 3, the wording "ratio range" and the encompassing line for the full length of Fig. 6 would appear to be sufficient to meet that objection. That Fig. already contains the large ratio-related numerals 2-6 and 1 at the very top thereof, which numbering was intended to satisfy the language "ratio of lengths approximately between the order of 2:1 and 6:1" of claim 12. If allowable, Claim 12 is of a breadth encompassing all of the specific ranges of 2, 4 and 6:1 of the now-canceled claims 13-15. Thus, these latter claims are being canceled. If claim 12 were further rejected for any reason, applicant would like to consider reinserting the individual specifics of claims 13-15. It will be noted that the only ratio shown in Crouch appears from the drawing to be 1:1, which, of course, is encompassed by applicant's broader claims that do not specify ratios.

S.N. 10/002,589
Stephen C. Heinrichs

Section 5 of Paper 3 rejected Claim 3 under *35 USC 112*. That rejection is now moot, since claim 3 had been canceled.

Brown '072, Norton '083, Otley '480 and Colombet (France) have been applied against numerous claims, primarily claims 1, 2, 4-6 and 18 as being anticipated under *35 USC 102(b)*. Since claim 1 is the only independent claim in the application, it will be discussed first in connection with each of the cited references.

Brown shows nothing more than a laminated strap structure capable of withstanding severe impact forces as great as 125,000 pounds. Each end acts as a single loop, the multiple bands of the two loops never being separated for "securement to discrete bodies by means of a pair of loops". Claim 1 now includes language that incorporates the term "separably" in describing the first body-securing loops. Accordingly, the Section 102(b) rejection on Brown is believed inapplicable.

Norton's sling does not have loops secured to each other by "attaching means (9, 11)", as suggested in the Examiner's statement in Section 8. Claim 1 defines "a central area at which.....said loops are firmly secured to each other". Both of Norton's endless bands 30 and 31 of Fig.12 and each section of the single (but double-looped) band of Fig. 13 are "slidably received in the tunnels of the load contacting part 6'." (Column 4, lines 59-65.) The looped end sections of the belts are then attached to the same crane hook, (line 65), and are not intended to be secured to discrete bodies at one end for supporting individual bodies from the remote end. Of interest, Norton does show in Fig. 6 how a hitch can be formed about a cylindrical object with his single loop sling. But he cannot use his double looped design of Figs. 12 and 13 for two discrete objects or bodies.

S.N. 10/002,589
Stephen C. Heinrichs

Otley shows a sling made of sewn-together plies or laminations for strengthening purposes. An eye at each end of the sling enables it to lift copper tubing, etc., (Column 1 line 17.) The stitching 16 secures "the plies or layers of the band" together. As such, one end cannot be formed into a pair of loops as called for in claim 1. There are no pairs of loops extending outwardly from the central area as the Examiner states.

Colombet shows and his Abstract, Title and drawing illustrate what appears to be a strap link used to interconnect a pair of carabiners 2 and 3 used by mountain climbers. Inside the lower end loop 16, a "tubular element 20 made of non-slipping material" is provided. It is sewn together and "made integral...with the end loop 16". It is noted that the title of the invention is "BELT FASTENER WITH INTEGRATED BRAKE..." Being a non-slipping material, the tubular brake may well be slightly expandable, which, if so, could account for what appears to be a space between the tubular element 20 and the end loop 16 in the drawing. The space may also be a draftsman's drawing exaggeration to simply show that end loop 16 and tubular element are free of each other even though they may actually touch. The dangers inherent in mountain climbing would seem to indicate that the brake material to prevent "sliding or pivoting" of the carabiner 3 would provide insufficient safety for the climber, thus the desire or need for a strong surrounding end loop 16 of the strap to give additional support to the tubular element 20. Regardless of this, however, it appears that Colombet can support but one carabiner at its lower end. To meet applicant's claim 1, the end loop 16 would have to support another body discrete from the carabiner 3, which obviously, it cannot.

Hopefully, the previous arguments pertaining to the references in relation to Section 102(b) and the amendments made primarily to claim 1 will illustrate that none of

S.N. 10/002,589
Stephen C. Heinrichs

the references anticipate applicant's device as now claimed. Likewise, since none of those same references even address the problems confronted and solved by applicant, it is also contended that the rejection in Section 12 under *35 USC 103(a)* does not apply. Notwithstanding this, certain claims are being canceled, namely, claim 3 which relates to the dimensional width of the strap, claims 13-15 which relate to specific different ratios of the opposite ends of the strap, claim 17 directed to the foldability of the strap, and claims 19 and 20 that relate to end-butting relationship and stitching of the strap. That leaves claims 7, 12 and 16 to be addressed under Section 103.

Regarding the different colors of the two continuous straps of claim 7, firemen in particular have a preference for the color difference if they wish to use the strap around the chest front and under the arms, and around the back and under the arms for a full body lift as shown in applicant's patent 6,062,173. In a wrist-dragging situation, the distinct colors (or in some cases fluorescent marking) in the shorter version of the strap preferred by most firemen, assures that the two loops are from the same end of the strap. Standard uniform training makes it simpler and faster to connect in an emergency situation where everyone on a team uses the same techniques of attachment. The colors are significant and valuable in that regard, and properly combine with the subject of parent claim 1 through intermediate claims 2 and 4.

Claim 12 is the only remaining claim in which ratios of the two opposite ends of the strap are involved. Since the strap has multiple purposes and uses, and since those uses involve individual preferences, applicant should be entitled to claim a preferred range of strap lengths independent of the broader aspects of the invention. Firemen personally carry the shorter 2:1 ratio version, so they can fold the strap over for ease of

S.N. 10/002,589
Stephen C. Heinrichs

carrying in a pocket, for example. The longer 6:1 ratio version, for chest and underarm lifting, may be carried in the fire truck if desired.

In Section 13, essentially the same rejection is applied under Section 103(a) based on Colombet. The previous distinctions over the disclosure of Colombet and the arguments presented in regard to Section 12 would appear applicable here.

It is respectfully submitted that the amended claims are allowable over the cited art, and allowance is requested.

Respectfully submitted,


William Weigl, Reg. No. 18,148

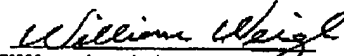
1805 Conwood Dr.,
Troy, OH 45373

Ph: 937/339-1180 FAX: 937/339-6531 e-mail: weiglpat@erinet.com

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this correspondence is being transmitted via facsimile to Primary Examiner Chin of Art Unit 3652 of the United States Patent and Trademark Office in Washington, DC at (703) in accordance with 37 C.F.R. 1.6(d) on

Jan. 20, 2004.


William Weigl, Reg. No. 18,148

S.N. 10/002,589
Stephen C. Heinrichs

Original Claims as marked to show changes made:

1. [A] An elongated unitary multi-purpose strap for securement to discrete bodies by means of a pair of loops at one end of said strap and for supporting said bodies from an end remote from said one end to enable dragging or suspending said bodies from said remote end, said strap comprising [of] flexible flat belting material having a plurality of loops extending outwardly from a central area of said strap at which [all of] said loops are firmly secured to each other by attaching means, said plurality of loops comprising a pair of first body-securing loops of essentially equal length separably extending outwardly in a first direction from said central area, and at least one second supporting loop extending outwardly from said central area in a direction opposite to said pair of first loops.
7. A multi-purpose strap according to claim [5] 4 wherein said first continuous strap is of a color different than said second continuous strap.
10. A multi-purpose strap according to claim 1 wherein said [multi-purpose] strap comprises a single length of flat belting which has been folded over at a midway point onto itself into two equal half-length sections, wherein both of said sections have been tucked inwardly and directed in equal amounts toward but not reaching said folded-over midway point, and wherein the inwardly tucked ends and adjacent portions of said belting have been stitched together to form said central area, said at least one second loop comprising a single loop extending between the central stitched area and said folded-over midway point.

S.N. 10/002,589
Stephen C. Heinrichs

16. A multi-purpose strap according to claim [13] 1 wherein the total extended length of said unitary strap between its ends is between twenty and thirty-six inches when said multi-purpose strap is extended in elongated form.